REMARKS

Reconsideration of this application, as amended, is respectfully requested.

Claims 1-29 are pending. Claims 1-29 were rejected.

Claims 1, 2, 11, 18, 19, 26, 27, 28, and 29 have been amended. No claims have been canceled. No claims have been added. Support for the amendments is found in the specification, the drawings, and in the claims as originally filed. Applicant submits that the amendments do not add new matter.

SPECIFICATION AND ABSTRACT OBJECTIONS

The Specification and Abstract were objected because of informalities.

Applicants here have amended the Specification and Abstract to replace the word "fourier" with "Fourier", as the Examiner suggested.

Therefore, Applicants respectfully request withdrawal of the objection.

CLAIM OBJECTIONS

Claims 1, 11, 18, 26 and 28 are objected to because of informalities.

Applicants here have amended claims 1, 11, 18, 26 and 28 to replace the word "fourier" with "Fourier", as the Examiner suggested.

Therefore, Applicants respectfully request withdrawal of the objection of claims 1, 11, 18, 26 and 28.

DOUBLE PATENTING

Claims 18-25 and 28-29 of the instant application are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 17-24 of co-pending Application No. 10/655,094 in view of the above analysis.

In this response, Applicants have submitted a timely filed terminal disclaimer and a check for the disclaimer fee.

Therefore, Applicants respectfully request withdrawal of the rejection of claims 18-25 and 28-29.

REJECTIONS UNDER 35 U.S.C. § 103

Claims 1-29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,671,312 of Lanier et al. ("Lanier"), in view of U.S. Patent No. 6,549,587 of Li ("Li").

Applicants have amended claim 1 to particularly point out that summing a set of discrete Fourier transform values corresponding to a set of high frequencies is performed to obtain a first power spectral density value and summing a set of discrete Fourier transform values corresponding to a set of low frequencies is performed to obtain a second power spectral density value. Determining a characteristic of the local loop is performed based upon the first power spectral density value and the second power spectral density value.

The Examiner acknowledged that "Lanier et al do not teach expressly using a first value derived from a set of high frequencies and a second value derived from a set of low frequencies" (Office Action, p. 6, 08/25/05). As such, Lanier fails to disclose, teach, or suggest summing a set of discrete Fourier transform values corresponding to a set of high frequencies to obtain a first power spectral density value and summing a set of discrete Fourier transform values

corresponding to a set of low frequencies to obtain a second power spectral density value, as recited in amended claim 1.

Additionally, Lanier merely discloses estimating the performance of a subscriber loop by examining the frequency response and detecting the slope of the loss characteristics (col. 3, lines 38-50), detecting the phase shift or phase delay data (col. 3, lines 51-61), or analyzing high frequency and low frequency loss characteristics (col. 4, line 51-63), in contrast to determining a characteristic of the local loop based upon the first power spectral density value and the second power spectral density value, as recited in amended claim 1.

Li discloses processing the upper frequency band tones and lower frequency band tones signals. More specifically, Li discloses adding signals that are output from downsamplers to obtain combined complex signals (Li, col. 34, lines 55-62, Figure 14).

Importantly, Li discloses

> If a single frequency is present within the bands defined by the bandpass filters, the combined complex signals x.sub.h (t) and x.sub.l (t) will be constant envelope (complex) signals. Short term power estimator 242 and 244 measure the power of x.sub.h (t) and x.sub.l (t) respectively and compares the power level with the requirements promulgated in ITU-T Q.24.

(Li, col. 35, lines 1-4) (emphasis added)

Thus, Li merely discloses adding signals that are output from downsamplers 222,2 24 and 226, 228 to obtain combined complex signals 234(a)x $_{h (t)}$ and 240(a)x $_{l (t)}$ and then measuring the power of the combined complex signals. This is in contrast to summing a set of discrete Fourier transform values corresponding to a set of high frequencies to obtain a first power spectral density value and summing a set of discrete Fourier transform values corresponding to a set of low frequencies to obtain a second power spectral density value, as recited in amended claim 1, Additionally, Li fails to disclose, teach, or suggest determining a characteristic of the local loop based upon the first power spectral density value and the second power spectral density value.

It is respectfully submitted that Li does not disclose, teach, or suggest, and in fact teaches away, from the limitations of amended claim 1 of summing a set of discrete Fourier transform values corresponding to a set of high frequencies to obtain a first power spectral density value and summing a set of discrete Fourier transform values corresponding to a set of low frequencies to obtain a second power spectral density value.

Additionally, Li, similarly to Lanier, fails to disclose, teach, or suggest determining a characteristic of the local loop based upon the first power spectral density value and the second power spectral density value, as recited in amended claim 1.

Thus, neither Lanier, nor Li discloses, teaches, or suggests such limitations of amended claim 1.

Therefore it is respectfully submitted that amended claim 1 is not obvious under 35 U.S.C. § 103(a) over Lanier in view of Li.

Because amended claims 11, 18, 26, and 28 contain at least discussed limitations of amended claim 1, it is respectfully submitted that amended claims 11, 18, 26, and 28 are likewise not obvious under 35 U.S.C. § 103(a) over Lanier in view of Li.

Given that claims 2-10, 12-17, 19-25, 27, and 29 depend from respective amended claims 11, 18, 26, and 28 and add additional limitations, Applicants respectfully submit that claims 2-10, 12-17, 19-25, 27, and 29 are not obvious under 35 U.S.C. § 103(a) over Lanier in view of Li.

CONCLUSION

It is respectfully submitted that in view of the amendments and arguments set forth

herein, the applicable rejections and objections have been overcome. If there are any additional

charges, please charge Deposit Account No. 02-2666 for any fee deficiency that may be due.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: <u>December 22, 2005</u>   By: _____

Michael J. Mallie
36,591

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, California 90025
(408) 720-8300